

THERE IS CLAIMED:

1. A plasma torch for locally heating a target, said torch including means for injecting a gas between the plasma and said target in the area of said target to be heated so as to reduce the power of said plasma in said area.
2. A method of fabricating an optical fiber preform including an operation of glazing the outside surface of said preform using inductive heating means of the plasma torch type for localized heating of the preform, in which method a flow of gas between the plasma and said preform in the area of the outside surface of said preform on which said plasma impinges reduces the power of said plasma in said area.
3. The method claimed in claim 2 wherein the flowrate of said gas is from 3 l/min to 6 l/min and is preferably equally to 4 l/min.
4. The method claimed in claim 2 wherein said gas is air.
5. The method claimed in claim 2 wherein said gas is a neutral gas.
6. A system for fabricating an optical fiber preform, said system including:
 - means for holding said preform at both ends,
 - inductive heating means of the plasma torch type for localized heating of said preform,
 - means for rotating said preform about its longitudinal axis,
 - means for moving said preform relative to said plasma torch in the direction parallel to said axis, and
 - means for injecting a gas between said preform and the plasma produced by said torch in the area of the outside surface of said preform on which said plasma impinges.
7. The system claimed in claim 6 wherein said gas injector means include an injector nozzle fixed relative to said torch, in the vicinity of which it is positioned so as to form, conduct and orient a jet of gas at a particular flowrate onto the area of the outside surface of said preform on which said plasma impinges.

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